**We claim:**

1. An integrator comprising:

an operational amplifier having input ports and output ports;

a first chopper stabilization modulator connected to the input ports;

a second chopper stabilization modulator connected to the output ports;

a plurality of feedback loops, each comprising a capacitor, connecting the second chopper stabilization modulator to the first chopper stabilization modulator;

an input circuit for receiving a reference voltage and an input voltage and for supplying the reference voltage and the input voltage in alternation to the input ports of the operational amplifier while bypassing the first chopper stabilization modulator; and

an output circuit for receiving an output voltage from the output ports of the operational amplifier while bypassing the second chopper stabilization modulator.

2. The integrator of claim 1, wherein the input circuit comprises:

first switches for receiving the reference voltage during an integration phase; and

second switches for receiving the input voltage during a sampling phase which is an inversion of the integration phase.

3. The integrator of claim 2, wherein the output circuit comprises third switches for outputting the output voltage during the sampling phase.

4. The integrator of claim 2, wherein the output circuit comprises third switches for outputting the output voltage during the integration phase.

5. The integrator of claim 1, wherein the input circuit comprises:

first switches for receiving the input voltage during an integration phase; and

second switches for receiving the reference voltage during a sampling phase which is an inversion of the integration phase.

6. The integrator of claim 5, wherein the output circuit comprises third switches for outputting the output voltage during the integration phase.

7. The integrator of claim 1, wherein the input circuit samples the input voltage at a sampling frequency, and wherein the first and second chopper stabilization modulators operate in accordance with a chopper stabilization modulating signal which is an alternating sequence at one-half of the sampling frequency to create a mirrored integrator.

8. The integrator of claim 1, wherein the first and second chopper stabilization modulators operate in accordance with a chopper stabilization modulating signal which is a random or pseudo-random alternating sequence with chosen spectral characteristics to create a spread-spectrum integrator.

9. The integrator of claim 1, wherein the first and second chopper stabilization modulators operate in accordance with a chopper stabilization modulating signal which is a random or pseudo-random alternating sequence with a deficiency of low-frequency spectral power to create a blue-noise integrator.

10. The integrator of claim 1, comprising a plurality of said first input circuits which are connected to the input ports of the operational amplifier.

11. The integrator of claim 10, wherein the plurality of input circuits are connected in parallel to the input ports of the operational amplifier.

12. The integrator of claim 11, wherein the plurality of input circuits have different sampling capacitances.